

# Package ‘ukgasapi’

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**Title** API for UK Gas Market Information

**Version** 0.17

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**Description** Allows users to access live UK gas market information via National Grid's API.

**Depends** R (>= 3.0.0)

**BugReports** <https://github.com/timothy-wong/ukgasapi/issues>

**License** GPL-2

**Imports** RCurl,XML

**LazyData** true

**Suggests** ggplot2, knitr, rmarkdown

**RoxygenNote** 6.1.1

**VignetteBuilder** knitr

**NeedsCompilation** no

**Repository** CRAN

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## R topics documented:

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dataItemExplorer      *Data Item Explorer API*

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### Description

This function connects to the UK National Grid's API for Data Item Explorer, which is a major data source for gas-related information. Internet connection must be available.

### Usage

```
dataItemExplorer(dataitems, fromdate, todate, datatype = "gasday",
  latestflag = "Y", applicableforflag = "Y", batchsize = -1,
  apiurl = paste0("https://marketinformation.natgrid.co.uk/",
    "MIPIws-public/public/publicwebservice.asmx"))
```

### Arguments

|                   |   |
|-------------------|---|
| dataitems         | A vector of characters containing data items to enquire via API.  |
| fromdate          | A character object specifying the start date. Date is inclusive.  |
| todate            | A character object specifying the end date. Date is inclusive.  |
| datatype          | A character object specifying the data type. Defaults to gasday   |
| latestflag        | A character object with length of one to specify whether to extract the latest data. This can either be Y or N. Defaults to Y.  |
| applicableforflag | A character object with length of one to specify whether dates specified are 'applicable for' or 'applicable on'. This can either be Y or N where Y indicates 'applicable for'. Defaults to Y.                          |
| batchsize         | An interger value indicating the batch size of each API call. To invoke a single API call, use any zero or negative values.   |
| apiurl            | A character object which points to National Grid's SOAP API. Under most circumstances users do not have to change this. Defaults to 'http://marketinformation.natgrid.co.uk/MIPIws-public/public/publicwebservice.asmx' |

### Details

The function submits an enquiry to the destination API using XML over HTTP using SOAP standard. The HTTP response is in XML format which function will parse internally and return a R dataframe object.

### Value

A dataframe object containing API response data.

### Author(s)

Timothy Wong, <timothy.wong@hotmail.co.uk>

**References**

- Graphical User Interface for Data Item Explorer  
<https://mip-prod-web.azurewebsites.net/DataItemExplorer>
- API specification  
<https://marketinformation.natgrid.co.uk/MIPIws-public/public/publicwebservice.asmx?op=GetPublicationDataWM>

**Examples**

```
# Specify the data item(s) to enquire from API
dataitems <- c("Storage Injection, Actual",
              "Storage Withdrawal, Actual")

# Initialise API (requires internet connection for this step)
response <- dataItemExplorer(dataitems,
                             fromdate = "2013-10-01",
                             todate="2015-09-30")

# Visualise the results on a chart
library(ggplot2)
ggplot(response,aes(x=ApplicableFor,y=Value,colour=PublicationObjectName)) + geom_line()
```

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